

3235 Omni Drive

Cincinnati, Ohio 45245

FAX (513) 752-2261

December 17, 1990

NUCLEAR REGULATORY COMMISION

ATTN: Mr. William H. Schultz

Region III

799 Rosevelt Road

Glen Ellyn, IL 60137

34-21463.02

Dear Mr. Schultz:

In response to your letter of November 30, 1990 and Ms. R. Pankratz on September 24, 1990 please be informed that we are doing our best to be in compliance with all regulations of NCR.

A leak-check for Nickel-63 has been done December 10, 1990 on our three (3) GC that have ECD detectors. The test was done according to the instruction in the attached pages and sent to the National Leak Test Center in North Tonawanda, NY 14120.

In addition little hoods are being installed above each of the detectors.

We do not have any other source of radation in our lab.

If you have any further questions, please feel free to contact me at (513) 752-2950.

Sincerely,

Mona Risk, Ph.D.

Director of Chemistry

Enclosure

MR:dmd

9101030205 901217 REG3 LIC30 34-21463-02 PD PDR

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National Leak Test Center

P. O. Box 486

North Tonawanda, N Y 14120

05890-96850

mples Enclosed



# Gas Chromatography

Service Note 5790A-5 (ECD) (Rev. 10/84)

# NICKEL 63 ELECTRON CAPTURE DETECTOR (RADIOACTIVE LEAK) WIPE TEST KIT INSTRUCTIONS

#### A. GENERAL

In the United States, the N.R.C. (or State agency in "Agreement States") requires Hewlett Packard Ni63 Electron Capture Detectors to be tested for radioactive leakage and/or contamination at intervals not to exceed six (6) months. It is essential that this test be performed in order to assure regulatory compliance. Owners in other countries should check local and national regulations for equivalent requirements. The user's first leak test should be performed no later than six months from the date on the HP wipe test certificate which accompanies the detector. This test certificate and all subsequent leak test records must be retained as evidence of regulatory compliance.

### WARNING:

Ni63 is a beta emitter with an energy maximum of 0.067 MeV. (It is generally considered that greater than 0.070 MeV is required to penetrate the protective layer of skin). However, Ni63 may be injurious if ingested even in microgram quantities, and adequate measures to prevent ingestion must be taken, including the use of disposable plastic gloves, good laboratory practice, and good personal hygiene (cleanliness).

#### B. SERIAL NUMBER BREAK

This note is applicable to any Hewlett Packard instrument which has a Nickel 63 Electron Capture Detector, factory or field installed.

- 7. The ECD wipe samples collected must be tested by an NRC or/ Agreement State authorized company offering this service. If you do not know of such a service, the two companies indicated below provide these services.
  - A. Nuclear Radiation Developments, Inc. 2937 ALT Blvd. North Grand Island, NY 14072

Phone: 1-716-773-7634

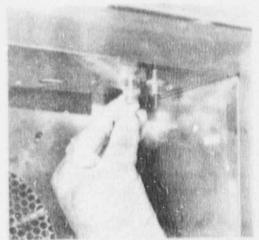
B. National Leak Test Center P.O. Box 486 North Tonawanda, NY 14120

Phone: 1-716-693-0550

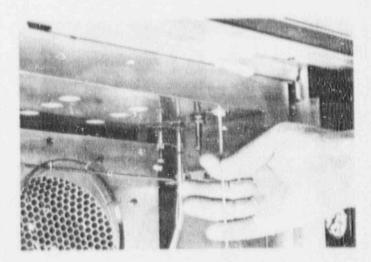
- 8. Place the three plastic bags into an envelope and send to a test company of your choice. Generally it is best to include a purchase order or payment directly with your samples, to cover the cost of the tests.
- 9. Sufficient material is supplied in each kit to perform four wipe tests. Extra Leakage Test Kits (Part No. 18713-60050) can be purchased from Hewlett Packard by calling the local HP Sales Officε.

JVW/mwj 10/01/84

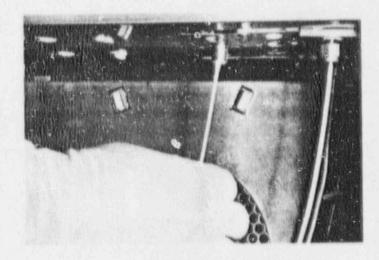
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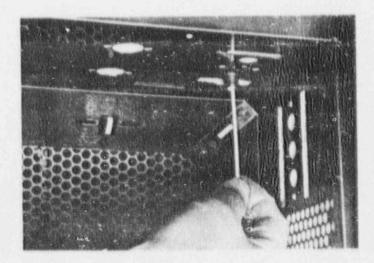
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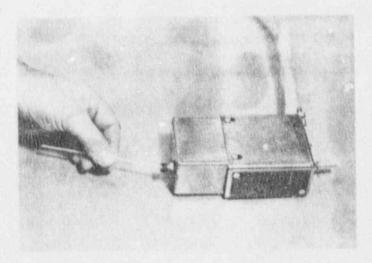
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C.



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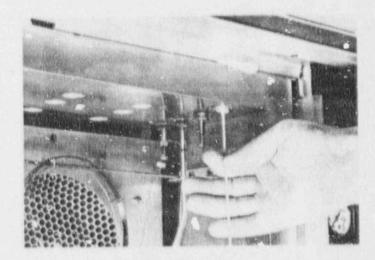


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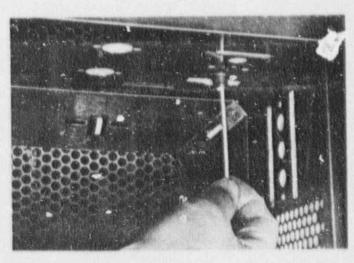
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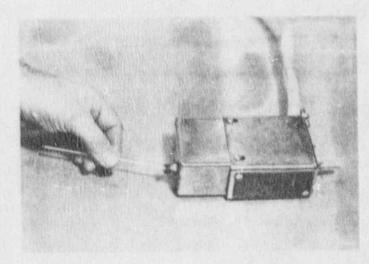
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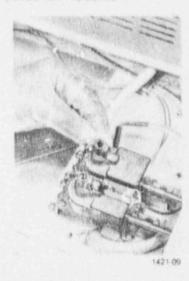
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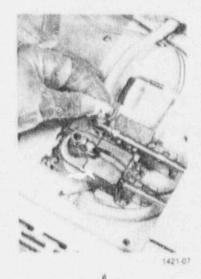


D.

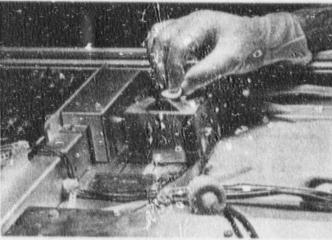
Figure 1

#### "DETECTOR HOUSING":

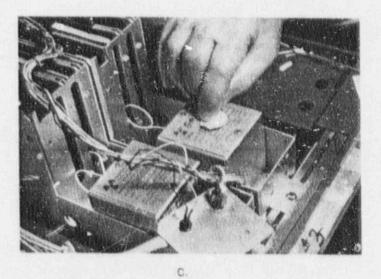


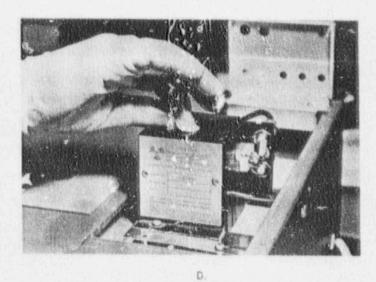












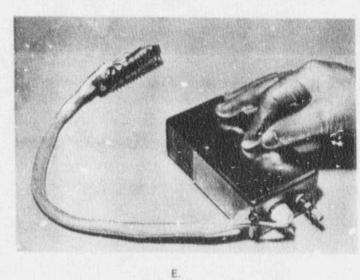
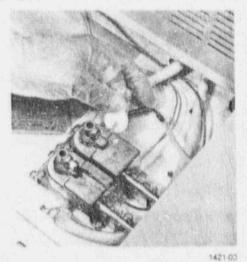
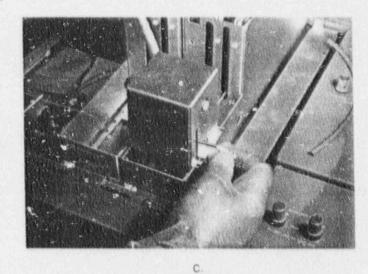


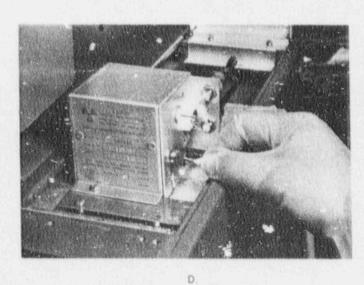
Figure 2

"DETECTOR EXIT":









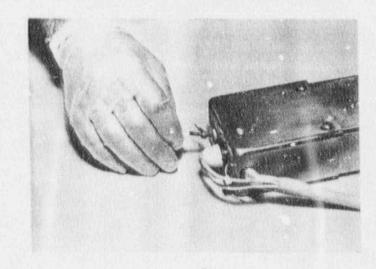
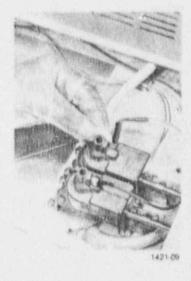
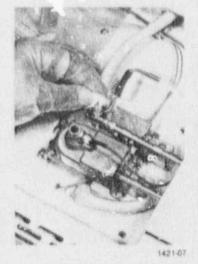


Figure 2

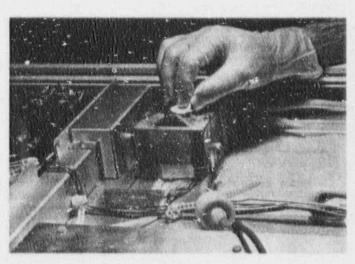
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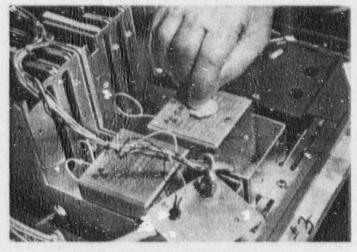




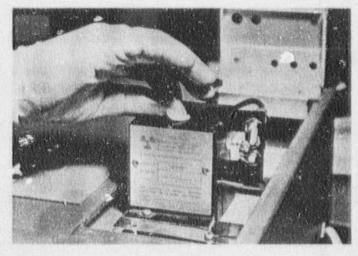
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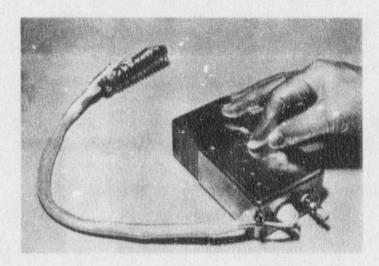
В.



C.



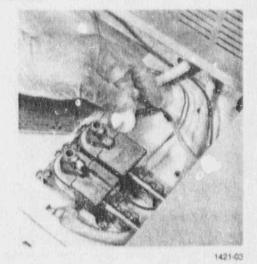
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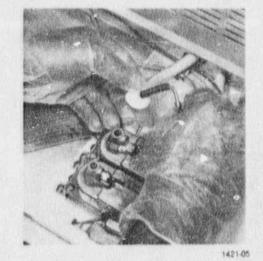


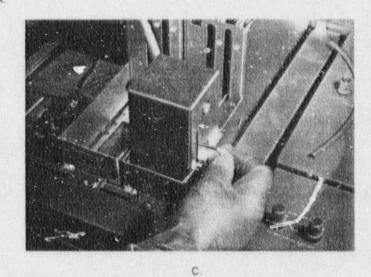
E.

Figure 2

#### "DETECTOR EXIT":







D.

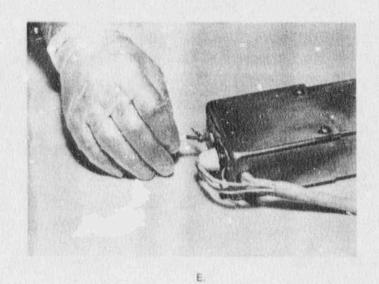


Figure 3